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5 CLAIMS

What is claimed is:"

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- A pharmaceutical formulation for topically administering a skin-lightening agent, the
 formulation comprising a skin-lightening agent in which said skin lightening agent is a 4substituted resorcinol which is in admixture with a pharmaceutically acceptable carrier, the
 carrier comprising a co-solvent and at least one hydroxyl compound selected from the group
 consisting of glycols, lower alkanols and water.
- 2. The formulation according to claim 2 in which said 4-substituted resorcinol is selected from the group consisting of 4-cyclohexyl resorcinol and 4-cyclopentyl resorcinol.
- 3. The formulation according to claim 3 in which said carrier is comprised of a glycol and a lower alkanol.
 - 4. The formulation according to claim 4 in which glycol is selected from the group consisting of methylene glycol, ethylene glycol, propylene glycol, butylene glycol, polyethylene glycol, and hexylene glycol.
- 5. The formulation according to claim 4 in which said lower alkanol is selected from the group consisting of methanol, ethanol, propanol, isopropanol, butanol, isobutanol, and tert-butanol.
 - 6. The formulation according to claim 4 in which said co-solvent is a dianhydrohexitol analog or derivative thereof
 - 7. The formulation according to claim 2 in which said carrier is comprised of: 1) from about 25 to about 95 % (vol/vol) of a hydroxyl compound selected from the group consisting of glycol, and a lower alkanol; and 2) about 5 to about 50% (vol/vol) of a co-solvent which is a dianhydrohexitol analog or derivative thereof
 - 8. The formulation according to claim 8 in which said carrier is an admixture of hexylene glycol, propylene glycol, ethanol, and dimethyl isorbide.
 - 9. A pharmaceutical formulation for topically administering a skin-lightening agent in which:
- 30 a) the skin lightening agent is 4-cyclopentyl resorcinol which is in admixture with a carrier,

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- 5 b) said carrier is comprised of
 - a. about 15 % (vol/vol) of dimethyl isorbide,
 - b. about 5% (vol/vol) of hexylene glycol,
 - c. about 40% (vol/vol) of propylene glycol and,
 - d. about 35% (vol/vol) of ethanol.
- 10 10. Use of a formulation according to anyone of claims 1-9 or 10 in the manufacture of a medicament for lightening skin.